Info For Property Owners

How Can I Tell If I Have an Ash Tree?

Leaflets on stalks usually number from 5–11. White ash leaflets are darker green on top and paler underneath than green ash leaflets. In the fall, foliage on green ash turns yellowish brown and purple on white ash. Emerald ash borer kills both species so distinguishing between the two is not important. Websites with additional information on ash identification and pictures are listed below.

Green ash leaflets

Photo credit: Dave Roberts, Michigan State University

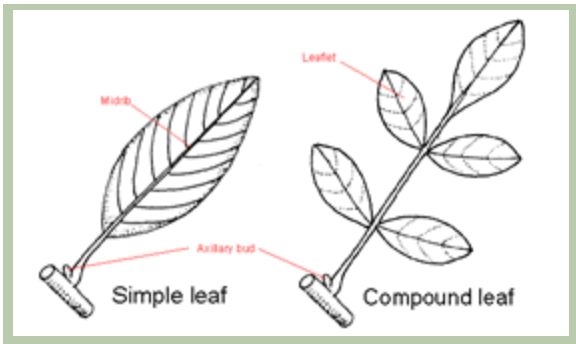
White ash leaflets

Photo credit: Dave Roberts, Michigan State University

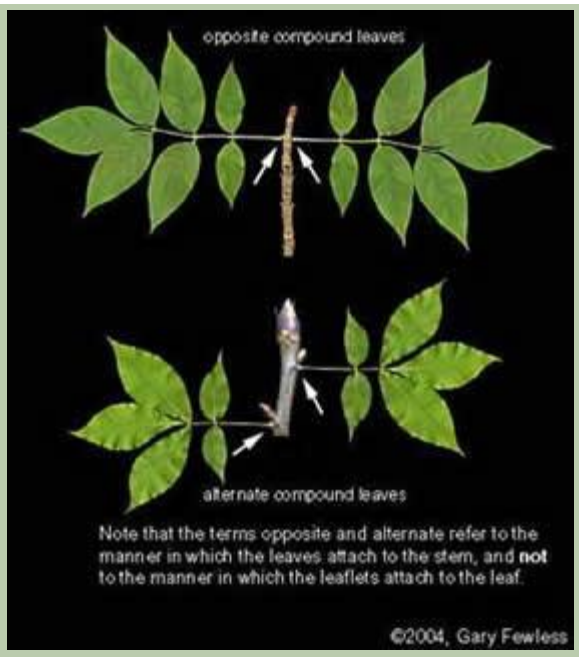
When leaves are present on trees, two quick observations will help you determine that a tree is not an ash:

1. Tree leaves are either simple or compound. On trees with simple leaves, such as oaks, maples, and elms, each leaf exists individually, attached to its own, separate leafstalk. Ashes have compound leaves where a leaf is made up of a collection of leaflets attached to a single leafstalk. Shagbark hickory, black walnut, and box elder also have compound leaves.

2. If your tree has compound leaves and could be an ash, determine whether stalks holding leaflets are attached directly opposite one another on branches (top) or alternate and are attached in a staggered fashion to branches (bottom). Stalks are alternate on most trees with compound leaves. Ashes are one of the few trees with compound leaves attached directly opposite one another. Green ash is pictured above, shagbark hickory below.



Source: Science and Plants for Schools (SAPS)



When leaves are not present, you can examine the bark (below) and twigs to help determine whether you have an ash. Ash bark is characterized by narrow, diamond-shaped ridges.

Green ash twigs (bottom right) have leaf scars with straight upper edges, fuzzy or velvety new growth, and reddish-brown buds. White ash leaf scars are crescent-shaped (i.e. notched along the upper edge).

Photo credit: Dave Roberts, Michigan State University

Photo Credit: Adam Agosta, LSU School of Renewable Natural Resources

Photo Credit: Brian Schwingle, WDNR

If branches emanate from the tree in a staggered fashion (left below), then the tree is not an ash. Ash branches, like their leaves, are attached directly opposite one another (center and right below). Bark or branch arrangement, however, should only be used to rule out other species. Consult a tree guide or click on one of the websites below for further help.

Not an ash

Ash

Ash

- For more pictures and descriptions of ash leaves, branching, and bark: http://www.emeraldashborer.wi.gov/articleassets/EABMIextension.pdf.

- For help on distinguishing ash from elm, hickory, black walnut, box elder, and mountain ashes: http://www.emeraldashborer.wi.gov/articleassets/E2892Ash.pdf. Mountain ashes are not true ash and are not susceptible to EAB.

- If you remain unsure whether you have an ash, contact City Forester, Ed Bartell, at 270-4289 or ed.bartell@city.fitchburg.wi.us

Are There Recognizable Signs an Ash Is Infected With Emerald Ash Borer?

Early detection of emerald ash borer is difficult, especially on large trees, because beetles attack the top first. Furthermore, dieback of branches in the upper crown can be caused by insects other than EAB. Unless a tree is heavily infested, chances of seeing an adult EAB beetle are extremely rare. Nevertheless, be aware that if you spot a small, green beetle on an ash trunk, branch, or leaf (left below) it could be EAB. A beetle is bullet-shaped, about only one-half inch long and one-eighth inch wide. Its back is dark metallic green, and its underside is bright emerald green. If its wings flare, a violet-colored abdomen will be visible (middle below). Several other insects and beetles, such as six-spotted tiger beetle (right below), are often mistaken for EAB. Six-spotted tiger beetles lives on the ground and, unlike EAB, are not found crawling on trunks, branches, or feeding on leaves.

Emerald ash borer	Emerald ash borer	Six-spotted tiger beetle

Photo credits: David Cappaert, Michigan State University, Bugwood.org

EAB is best recognized by the following:

Exit holes: When an EAB beetle emerges in the spring, it leaves behind a D-shaped exit hole, about one-eighth inch in diameter. Holes can be oriented in any direction and found anywhere on the trunk. Also check lower branches. Look for holes if you notice one or more of the symptoms of an EAB infestation pictured below.

Photo credit: Deborah McCullough, Michigan State University

Photo credit: David R. McKay, USDA APHIS PPQ, Bugwood.org

Dieback of branches in the upper and outer crown along with suckering on the trunk and lower branches could indicate the presence of EAB. Branch dieback alone can be caused by a variety of natural diseases and insects. EAB is more likely if suckers also appear anywhere on the tree below dead branches. A tree sends out suckers to compensate for lost foliage.

Photo Credit: www.emeraldashborer.info

Vertical bark splits on the trunk develop in areas where larvae have fed, often revealing their S-shaped excavation paths (below left). This usually points toward an advanced infestation as larvae have bored inward from eggs deposited on the trunk. Most branches are dead so larvae must feed where food is available.

Photo Credit: Michigan Department of Agriculture

Photo Credit: Steven Katovich, USDA Forest Service, Bugwood.org

Woodpeckers feeding excessively on an ash tree in the winter are reason to suspect EAB. Jagged holes and patches of flecked off bark could mark spots where woodpeckers have repeatedly drilled for EAB larvae (above right).

For more pictures and information on EAB signs and symptoms go to:

http://www.dnr.state.wi.us/forestry/fh/ash/eab-symptoms.htm

http://www.entomology.wisc.edu/emeraldashborer/

Whom Should I Contact If I Suspect My Tree Might be Infested With Emerald Ash Borer?

If you are sure you have an ash and notice signs or symptoms of EAB, please first call the City Forester. If he is unavailable, leave a message and call the Director of Parks, Recreation, and Urban Forestry. Leave a message if necessary. If you speak with neither directly, then call the Department of Agriculture, Trade, and Consumer Protection's EAB hotline. Emailing digital photos to the City Forester or Parks Director is encouraged.

Ed Bartell- Fitchburg City Forester

Phone: 608-270-4289

E-mail: ed.bartell@city.fitchburg.wi.us.

Scott Endl- Director of Parks, Recreation, and Urban Forestry

Phone: 608-270-4288

E-mail: scott.endl@city.fitchburg.wi.us

Wisconsin Department of Agriculture, Trade, and Consumer Protection

Emerald Ash Borer Hotline: 1-800-462-2803.

Can the City Require the Removal of an Ash Infected With EAB on Private Property?

Fitchburg's City Parks and Forestry Tree and Shrubbery Ordinance gives the City Forester authority over a private tree in the event it becomes a public nuisance. As defined in the ordinance, a tree "infested with injurious insects or pests" constitutes a public nuisance. Emerald ash borer is an injurious insect and could inflict damage rivaling or exceeding that caused by Dutch elm disease. If an EAB infestation is confirmed in a tree on private property, the City Forester will issue a written notice specifying that it be removed within 30 days at the owner's expense.